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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of

GILBERT W. BUCK

Patent No.: 6,845,627 B1

Issued: January 25, 2005

Serial No: 10/705,203

Filed: November 10, 2003

For: CONTROL SYSTEM FOR AN
AIRCRAFT GALLEY COOLER

Examiner: Harry B. Tanner

Group Art Unit: 3744

Client ID/Matter No: BEINT 64757

March 18, 2005
Los Angeles, California 90045

REQUEST FOR CERTIFICATE OF CORRECTION

Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The above-identified patent has been found to have the errors set forth in the enclosed Certificate of Correction. It is requested that this Certificate of Correction be issued and returned to us. Since these errors occurred in both the final printing phase of the patent and in the final application, a check in the amount of \$100.00 is enclosed to cover the necessary fees. Should the Office determine that additional fees are needed, please charge Deposit Account No. 06-2425.

The errors are verifiable in the patent application file as follows:

ERROR

VERIFICATION

Column 3, line 16, delete "may" and insert --may be--. Applicant error.

Column 3, line 67, after "air" delete "," (comma). Application filed on November 10, 2003. See Attachment A, page 6.

Column 12, line 19, delete "coot" and insert --cool--. Application filed on November 10, 2003. See Attachment A, page 23.

Column 12, line 30, after "galley" delete "," (comma). Application filed on November 10, 2003. See Attachment A, page 23.

These errors occurred in good faith and correction thereof does not involve such changes in the patent as would constitute new matter or would require re-examination. It is requested that a Certificate of Correction be issued and returned to us.

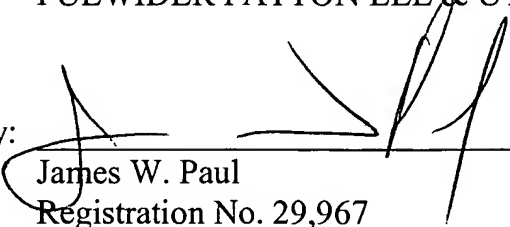
Attached hereto, in duplicate, is Form PTO-1050, with at least one copy being suitable for printing.

A duplicate of this document is attached.

Respectfully submitted,

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TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/705,203
	Filing Date	November 10, 2003
	First Named Inventor	Gilbert W. Buck
	Art Unit	3744
	Examiner Name	Harry B. Tanner
Total Number of Pages in This Submission	Attorney Docket Number	BEINT-64757

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
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Firm or Individual name	FULWIDER PATTON LEE & UTECHT, LLP
Signature	
Date	March 18, 2005

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the			
Typed or printed name	JAMES W. PAUL	Date	March 18, 2005
Signature			

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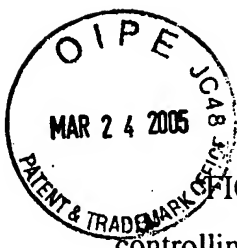


FIG. 6 is a signal block diagram of an electronic control system for controlling the galley refrigeration system for aircraft according to the invention.

FIG. 7 is a schematic diagram depicting data communication connections between components of the galley refrigeration system.

5 FIG. 8 is a flow chart depicting operational steps for regulating the temperature of the galley air cooling unit.

FIG. 9 is a flow chart depicting operational steps for defrosting an air-over galley air cooling unit.

10 FIG. 10 is a flow chart depicting operational steps for defrosting an air-through galley air cooling unit.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is directed to a control system for an aircraft galley air cooling unit for refrigerating removable food carts within the galley. Generally, the system for refrigerating food carts is a liquid chiller system. The liquid chiller
15 system may be an aircraft-mounted distributed thermal management system that provides cooled, dehumidified air to galleys distributed throughout the aircraft. The food carts are used to store food for passengers and are controlled within precise temperature limits to prevent food spoilage or freezing.

More specifically, the present invention includes an electronic control
20 system for monitoring and controlling three distributed refrigeration subsystems of the liquid chiller system. The first refrigeration subsystem includes at least one remote chiller, the second refrigeration subsystem includes at least one galley air cooling unit, and the third refrigeration subsystem includes at least one recirculation unit.

either the liquid refrigerant indicator indicates that the liquid refrigerant is sufficiently cool to regulate the air temperature in the galley air cooling unit or the liquid refrigerant is at least 2°C (4°F) below the selected set point.

5 5. The method of claim 4, further including:

 closing the valve and turning the fan off if any of the following conditions are met:

 the galley air cooling unit switch is turned OFF,

 the proximity switch indicates that there is not a food cart within the
10 galley air cooling unit, or

 both the liquid refrigerant indicator indicates that the liquid refrigerant is not sufficiently cool to regulate the air temperature in the galley air cooling unit and the liquid refrigerant is at least 6°C (10°F) above the selected set point.

 6. The method of claim 4, wherein turning the fan on includes randomly
15 turning the fan on either immediately or after about a one second delay each time the fan is required to be turned on.

 7. The method of claim 4, further including:

 defrosting the galley air cooling unit following the expiration of a first preset duration of time when the air temperature in the galley air cooler is being regulated
20 to the selected set point, the defrosting the galley air cooling unit including,

 closing the valve,

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

PATENT NO. : 6,845,627 B1
DATED : January 25, 2005
INVENTOR(S) : Gilbert W. Buck

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 3, line 16, delete "may" and insert --may be--.

Column 3, line 67, after "air" delete "," (comma).

Column 12, line 19, delete "coot" and insert --cool--.

Column 12, line 30, after "galley" delete "," (comma).

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